## (12) INTERNATIONAL APPLICATION PUBLISHED UNDER THE PATENT COOPERATION TREATY (PCT)

# (19) World Intellectual Property Organization

International Bureau



# 

#### (43) International Publication Date 10 March 2005 (10.03.2005)

### (10) International Publication Number WO 2005/021922 A3

(51) International Patent Classification7: 37/00, 55/00

F16L 35/00.

(21) International Application Number:

PCT/US2004/028438

(22) International Filing Date:

1 September 2004 (01.09.2004)

(25) Filing Language:

English

(26) Publication Language:

English

(30) Priority Data: 60/499,528

2 September 2003 (02.09.2003) US

(71) Applicant (for all designated States except US): EN-VENTURE GLOBAL TECHNOLOGY, LLC [US/US]; 16200 A Park Row, Houston, TX 77084 (US).

- (72) Inventors; and
- (75) Inventors/Applicants (for US only): COSTA, Scott

[US/US]; 2011 Willow Point, Kingwood, TX 77330 (US). MENCHACA, Jose [US/US]; 9800 Pagewood Lane, Number 210, Houston, TX 77042 (US).

- (74) Agent: HAYNES AND BOONE LLP; 901 Main Street, Suite 3100, Haynes and Boone, LLP, Dallas, Texas 75202 (US).
- (81) Designated States (unless otherwise indicated, for every kind of national protection available): AE, AG, AL, AM. AT, AU, AZ, BA, BB, BG, BR, BW, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, EG, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NA, NI, NO, NZ, OM, PG, PH, PL, PT, RO, RU, SC, SD, SE, SG, SK, SL, SY, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, YU, ZA, ZM,
- (84) Designated States (unless otherwise indicated, for every kind of regional protection available): ARIPO (BW. GH.

[Continued on next page]

(54) Title: THREADED CONNECTION FOR EXPANDABLE TUBULARS

(57) Abstract: A threaded connection (20) for expandable tubulars (16), (18) with at least one stress concentrator (26).

WO 2005/021922 A3

# 

GM, KE, LS, MW, MZ, NA, SD, SL, SZ, TZ, UG, ZM, ZW), Eurasian (AM, AZ, BY, KG, KZ, MD, RU, TJ, TM), European (AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IT, LU, MC, NL, PL, PT, RO, SE, SI, SK, TR), OAPI (BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG).

#### Declaration under Rule 4.17:

of inventorship (Rule 4.17(iv)) for US only

#### Published:

with international search report

- before the expiration of the time limit for amending the claims and to be republished in the event of receipt of amendments
- (88) Date of publication of the international search report: 19 May 2005

For two-letter codes and other abbreviations, refer to the "Guidance Notes on Codes and Abbreviations" appearing at the beginning of each regular issue of the PCT Gazette.

### INTERNATIONAL SEARCH REPORT

International application No.

PCT/US04/28438

A. CLASSIFICATION OF SUBJECT MATTER					
IPC(7) : F16L 35/00 37/00 55/00 US CL : 285/382, 333, 390, 114, 29/507,522.1,523					
According to International Patent Classification (IPC) or to both national classification and IPC					
B. FIELDS SEARCHED					
Minimum documentation searched (classification system followed by classification symbols) U.S.: 285/382, 333, 390, 114, 29/507,522.1,523					
Documentation searched other than minimum documentation to the extent that such documents are included in the fields searched					
Electronic data base consulted during the international search (name of data base and, where practicable, search terms used)					
Electronic and case constitute and manimistral section (mane of that case and, where practically, scarch terms used)					
C. DOCUMENTS CONSIDERED TO BE RELEVANT					
Category *	Citation of document, with indication, where appropriate, of the relevant passages			Relevant to claim No.	
х	WIPO 200201102 A1 (Coulon et al.) 03 January 2002 (03-01-02), see expanded threaded			1,3-7,14-20,22-25,27-	
— Y	members 11,12 and groove 21 or 14 which will inherently act as a stress concentrator as			.42	
1	applies in the present invention except in claims 18 and 37-39 where no stress concentrator is claimed.			8-12,21,26	
Y	US 6,390,720 A (LeBegue et al.) 21 May 2002 (21-05-02), see column 2, lines 55-65 and			8-12,21 and 26	
- 1	stress relief grooves 36 shown internally in fig. 2 and noted to be either single, plural or helical.				
x	US 5,667,252 A (Schafer et al) 16 September 1997 (16-09-97), see fig. 3 which shows tube 200 expanded to tube 202.			42	
				A V.	
Purther	documents are listed in the continuation of Box C.		See patent family annex.		
Special categories of cited documents:     "T" later document published after the international filing date or priorit date and not in conflict with the application but cited to understand.					
"A" document defining the general state of the art which is not considered to be the principle or theory underlying of particular relevance			the principle or theory underlying the	invention	
"E" cartier application or patent published on or after the international filling consi			document of particular relevance; the considered novel or cannot be consider step when the document is taken alone	red to involve an inventive	
"L" document which may throw doubts on priority claim(s) or which is cited to establish the publication date of another cluston or other special reason (as specified)		•Y•	"Y" document of particular relevance; the claimed invention cannot be considered to involve an inventive step when the document is combined with one or more other such documents, such combination		
"O" document referring to an oral disclosure, use, exhibition or other means				C ACT	
"A" document member of the same patent family  "P" document published prior to the international filing date but later than the  priority date claimed.					
Date of the actual completion of the international search  Date of mailing of the international search report				ch report	
19 January 2005 (19.01.2005)					
Name and mailing address of the ISA/US  Mail Stop PCT, Ann: ISA/US  Authorized officed Title Conference of the ISA/US					
	Commissioner for Patents  Grant R Nicholson				
	P.O. Box 1450 Alexandria, Virginia 22313-1450  Telephone No. 703-308-1113				
Pacsimile No. (703) 305-3230					
2 2222	(210 (		<del></del>		

Form PCT/ISA/210 (second sheet) (January 2004)